Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

2006-2011 Minnesota Department of Natural Resources (MNDNR) Topographic Lidar: Minnesota LiDAR

1.2. Summary description of the data:

This data set consisted of the planning, acquisition, survey, processing and deliverable creation for 42 counties in Minnesota which include: Olmsted, Wabasha, Goodhue, St. Louis, Fillmore,

Pine, Kanabec, Morrison, Mille Lacs, Waseca, Blue Earth, Steele, Dodge, Nicollet, Sibley, Freeborn, Faribault, Mower, Isanti, Anoka, Ramsey, Dakota, Wright, Scott, Washington, Rice, Hennepin,

Le Sueur, Carver, Benton, Sherburne, Chisago, Koochiching, Itasca, Crow Wing, Aitkin, Carlton, Winona, Houston, Cook, and Lake. The tiling scheme was provided by the Minnesota Department of

Natural Resources and is from the USGS 16th 1:24,000 guadrangle tiles.

This data set is classified according to ASPRS specifications. Not all counties contain all classes. The classes are as follow:

Class 0: Never Classified

Class 1: Unclassified

Class 2: Ground

Class 3: Low Vegetation

Class 4: Medium Vegetation

Class 5: High Vegetation

Class 6: Buildings

Class 7: Low Points (Noise)

Class 8: Model Key-points

Class 9: Water

Class 10: Ignored Ground (Breakline Proximity)

Class 11: Scan Edge

Class 12: Overlap

The dates of collection for each data set are as follows:

-Pine County: 10/25/2006 - 11/6/2006

-Chisago County: 04/18/2007 - 04/28/2007

-Crow Wing County: 2008

-Wright County: 04/23/2008 - 05/28/2008

-Southeast: 11/18/2008 - 12/28/2008

Wabasha County, Winona County, Houston County, Olmsted County, Fillmore County, Dodge County, Mower County, Freeborn County,

Steele County, Rice County

-Red River Basin: 4/19/2008 - Spring 2010

Le Sueur County, Waseca County, Faribault County, Sibley County, Nicollet County

-Arrowhead: 05/03/2011 - 06/02/2011

Cook County, Lake County, St. Louis County, Carlton County

-Twin Cities Metro: Spring/Fall 2011, Spring 2012

Morrison County, Mille Lacs County, Kanabec County, Benton County, Isanti County, Anoka County, Sherburne County,

Hennepin County, Ramsey County, Washington County, Dakota County, Carver County, Goodhue County, Scott County

-Central Lakes Region: Spring 2012

Aitkin County

-Blue Earth County: 04/06/2012

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2006-10-25 to 2012-04-06

1.5. Actual or planned geographic coverage of the data:

W: -94.000241, E: -89.468836, N: 48.656168, S: 43.468706

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) las

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2011-06-06 00:00:00 Lidar data processing by the collection firm and MNDNR varied for each data set. For more information, please refer to the detailed processing steps in the original documentation. A copy of the original documentation for each record may be found here: https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/1196/supplemental
- 2013-04-01 00:00:00 The NOAA Office for Coastal Management (OCM) downloaded topographic files in .laz format from Minnesota's website in May, 2012 . The files contained lidar elevation measurements. The data were received in UTM Zone 15N, NAD83 coordinates and were vertically referenced to NAVD88 using the appropriate Geoid03 or Geoid09. The vertical units of the data were meters. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The topographic laz files were converted from a Projected Coordinate System (UTM Zone 15N) to a Geographic Coordinate system (NAD 83). 2. The topographic laz files' horizontal units were converted from meters to decimal degrees. 3. The topographic laz files' were converted from NAVD88 elevations to NAD83 ellipsoidal elevations using Geoid03 (Southeast, Red River Basin,Crow Wing County,Wright County, Chisago County, Pine County) or Geoid09 (Blue Earth County, Central Lakes,Twin Cities Metro,Arrowhead). 4. If Classes 13, 17, 18 (Unknown) existed in the data, they were converted to Class 0 (Never Classified). 5. If Classes 14, 15 (Bridges) existed in the data, they were converted to Class 1 (Unclassified).
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/49812

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

http://www.mngeo.state.mn.us/chouse/elevation/lidar.html#datahttps://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=1196

7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=1196

;

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Office for Coastal Management - Charleston, SC

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.